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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/627,313

07/24/2003

Philip E. Eggers

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EXAMINER

STIGELL, THEODORE J

ART UNIT

PAPER NUMBER

3763

NOTIFICATION DATE

DELIVERY MODE

12/04/2008

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

intel_prop@arthrocare.com

Office Action Summary	Application No. 10/627,313	Applicant(s) EGGERS ET AL.	
	Examiner THEODORE J. STIGELL	Art Unit 3763	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 July 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 54-70 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 54-70 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 July 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>6/23/2008, 10/21/2008</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 7/21/2008 has been entered.

Specification

The amendments to the specification filed on 7/21/2008 have been acknowledged and accepted.

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "active electrode surface consisting of a hemispherical geometry" must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure

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is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 54-56 and 59-70 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bales et al. (4,682,596). See Figure 3 and the respective portions of

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the specification. Bales et al. teach a surgical instrument for applying high-frequency electrical energy to tissue at a target site comprising a shaft (84), a hemispherical shaped electrode terminal (86), an annular return electrode (90) spaced proximally from the hemispherical-shaped electrode, the return electrode having a surface area substantially larger than that of the electrode terminal, an electrically conductive fluid supply (deionized water), a connector (94,92) extending from the electrode terminal to the proximal end of the shaft and an electrically conducting electrode support (88) that can be made of either ceramic or glass (See Column 7, lines 10-16). Bales et al. also disclose a voltage supply configured to supply voltage to the electrode terminals. Bales et al. do not disclose the surface area of the tissue treatment surface. However, these parameters are deemed matters of design choice, well within the skill of the ordinary artisan, obtained through routine experimentation in determining optimum results.

Bales et al. also does not disclose to include an electrically conductive fluid wherein the electrical conductivity is at least 0.2 mS/cm, but because the Applicant has not stated in the instant specification that this particular conductivity works better than other electrical conductivity this limitation is also being treated as a matter of design choice. Therefore, the Applicant is merely claiming an electrically conductive fluid supply. The Examiner notes that Bales discloses using deionized water, which will have at least some electrical conductivity. Absent any evidence to the contrary, this will remain the Examiner's position.

The examiner maintains that Bales discloses an electrode with a hemispherical geometry. It is unclear as to what difference there is between an electrode "comprising

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a hemispherical geometry” and an electrode “consisting of a hemispherical geometry”. However, the examiner maintains that the difference, if any, does not result in a patentable difference. Furthermore, the specification does not describe any advantage of a hemispherical geometry over any other geometry and furthermore appears to support the position that the shape is not critical to the invention. See at least paragraph [0057]. For these reasons, the examiner maintains that the “consisting of a hemispherical geometry” limitation is design choice consideration and fails to patentably distinguish over the prior art.

Claims 57-58 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bales et al. (4,682,596) in view of Herczog et al. (GB 2037167). Bales et al. teach all of the limitations of the claims except for explicitly reciting that the shaft has a bent configuration. Herczog et al. teach a bent configuration in the distal portion of the shaft. It would have been obvious to one of ordinary skill in the art at the time of invention to modify the shaft of Bales et al. with the bent configuration taught by Herczog et al. for the well known purpose of providing for a transverse treatment location for structures parallel to the device.

Claims 54-70 are rejected under 35 U.S.C. 103(a) as being unpatentable over Auth et al. (4,532,924). Auth discloses a surgical instrument for applying high frequency electrical energy to tissue at a target site comprising a shaft (24) having a proximal end and a distal end, an electrode terminal (22) having an active electrode surface (46, 48) at or near the distal end of the shaft, the active electrode surface comprising a substantially planar geometry that is slightly rounded at the edges, a return electrode

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(58) in the form of an annular band, an electrode support (40) that holds the electrode terminal, an electrically conductive fluid supply delivering electrically conductive fluid at a distal end of the electrode terminal for providing a conductive path between the active electrode surface and the return electrode, and a connector (30) extending from the electrode terminal to the proximal end of the shaft.

Auth does not disclose to include an electrically conductive fluid wherein the electrical conductivity is at least 0.2 mS/cm, but because the Applicant has not stated in the instant specification that this particular conductivity works better than other electrical conductivity this limitation is also being treated as a matter of design choice. Therefore, the Applicant is merely claiming an electrically conductive fluid supply, which Auth discloses.

Auth does not specifically teach that the active electrode surface consists of a hemispherical geometry or that the return electrode has a surface area substantially larger than the electrode terminal. However, the applicant has not disclosed that either of these limitations provide any advantage or work better than any other configuration. Therefore, both limitations are deemed to be matters of design choice that fail to patentably distinguish over the prior art.

Response to Arguments

Applicant's arguments filed 7/21/2008 have been fully considered but they are not persuasive. In response to the applicant's argument that Bales does not teach the new limitations, the examiner respectfully disagrees. As stated above, it is not clear what the difference is between the shape as formerly recited and as currently recited. If

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there is any difference, it is certainly a very small difference that does not pass the threshold for patentability. This is especially true since a hemispherical geometry appears to provide no advantage over any other geometry including geometries that are substantially different (ex., planar, disk shaped). Furthermore, the examiner maintains that the fluid disclosed in Bales will have some conductivity and is capable of providing a conductive path between the active electrode and the return electrode.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to THEODORE J. STIGELL whose telephone number is (571)272-8759. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nicholas Lucchesi can be reached on 571-272-4977. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Theodore J Stigell/
Examiner, Art Unit 3763

/Nicholas D Lucchesi/
Supervisory Patent Examiner, Art Unit 3763